

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JACOB FRANK DE GROOT and LARS HANSEN

Appeal No. 2001-1078
Application No. 08/750,910

ON BRIEF

Before ABRAMS, McQUADE, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 3 and 7. Claims 4 to 6, 8 and 9 have been allowed. No claim has been canceled.

We REVERSE.

BACKGROUND

The appellants' invention relates to a plant cube having a laminated structure of mineral wool fibres oriented in parallel to each other (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Blok	EP 0 209 958	Feb. 1, 1987
Dunn	WO 89/01736 ¹	Mar. 9, 1989

Claims 1 to 3 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Blok in view of Dunn.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the final rejection (Paper No. 19, mailed September 15, 1999) and the answer (Paper No. 25,

¹ In determining the teachings of Dunn, we will rely on the translation provided by the USPTO. A copy of the translation is attached for the appellants' convenience.

mailed July 25, 2000) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 24, filed April 17, 2000) and reply brief (Paper No. 26, filed September 29, 2000) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 to 3 and 7 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of

obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claim 1, the sole independent claim on appeal, reads as follows:

A plant cube comprising a block of mineral fibres, the block having a top surface, a bottom surface and four side surfaces, wherein the block comprises a laminated structure formed from a superfolded layer of parallel oriented mineral wool fibres, thereby forming a plurality of sublayers connected by bends in the layer, wherein all the mineral fibers in the sublayers are parallel to each other.

Blok's invention relates to a water-absorbing porous product made of water-absorbing mineral fibrous material for the cultivation of plants. The product comprises water-repellent oxygen-storing elements which are able to

release oxygen in a delayed manner to a liquid sucked up into the porous product. As shown in Figure 1, a small block 1 includes one layer 2 of water-repellent mineral wool flakes between layers 3 and 4 of water-absorbing mineral wool.

Figure 6 shows diagrammatically a strip of water-absorbing mineral wool 11 having a layer of water-repellent flakes of mineral wool 14 which is folded together several times in a zigzag pattern. Blok teaches (column 5, lines 35-39) that after the being folded, small blocks, such as shown in Figure 1, can be cut out of a strip of this type along the broken lines 15 shown in Figure 6.

Dunn discloses cultivation substrates based on mineral wool. As shown in Figure 3, a substrate for cultivation without soil is based on a mineral fibre felt and packaged into the form of cakes 10 capable of supporting a plurality of plants. Dunn teaches that the structure of the cakes is such that in the position of use the fibers are arranged essentially in vertical planes 9 and thereby plant production is improved.

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Blok and claim 1, it is our opinion that the only differences are that the plant cube includes a plurality of sublayers connected by bends and all the mineral fibers in the sublayers are parallel to each other.

In the rejection before us, the examiner determined (final rejection, p. 2) with respect to claim 1 that Blok lacked only the limitation that all the mineral fibers in the sublayers are parallel to each other and that such difference would have been obvious to one having ordinary skill in the art from the teachings of Dunn.

Even if the examiner's determination regarding the obviousness of modifying Blok to have all the mineral fibers in the sublayers to be parallel to each other in view of the

teachings of Dunn is correct, such a modification of Blok does not arrive at the claimed invention since such a plant cube would lack a plurality of sublayers connected by bends (the bend limitation) as pointed out by the appellants (brief, pp. 5-7; reply brief, pp. 2-3). In that regard, the critical issue for the resolution of the question of obviousness, as 35 U.S.C. § 103 makes plain on its face, is whether the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made. Thus, in this case, the examiner's blatant dismissal of the bend limitation because the appellants have not established criticality (answer, pp. 3-4) is without merit. Additionally, the examiner's position (answer, p. 4) that the strip shown in Figure 6 prior to being cut is considered to be a cube is, in our view, sheer speculation without any support in the disclosure of Blok.

Since the examiner has not set forth a prima facie case of obviousness for the reasons set forth above, the decision of the examiner to reject claim 1, and claims 2, 3 and 7 dependent thereon, under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject
claims 1 to 3 and 7 under 35 U.S.C. § 103 is reversed.

REVERSED

NEAL E. ABRAMS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN P. McQUADE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JEFFREY V. NASE)	
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